

Lowe, Northcutt, and Sears Conservation Areas

William Lowe Conservation Area

Clarence L. Northcutt Memorial Conservation Area

F.O. and Leda J. Sears Memorial Wildlife Area

Fifteen-Year Area Management Plan FY 2017-2031





P. D. Simon
Wildlife Division Chief



8 July 2016
Date

Lowe, Northcutt, and Sears Conservation Areas Management Plan Approval

Page

PLANNING TEAM

Tim James, Wildlife Management Biologist

Craig Gemming, Fisheries Management Biologist

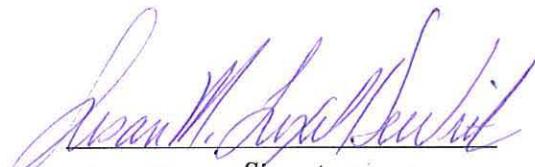
Angela George, Resource Forester

Norman Steelman Jr., Conservation Agent

Chris Newbold, Natural History Biologist

CENTRAL REGION

RCT Chair



10/23/16
Signature Date

WILDLIFE DIVISION

Wildlife Management Chief



7/6/16
Signature Date

OVERVIEW

Area Name	Area Number	Year Acquired	Acreage	County	Administrative Responsibility	Maintenance Responsibility
William Lowe Conservation Area (Lowe CA)	200306	2003	133	Audrain	Wildlife	Wildlife
Clarence L. Northcutt Memorial Conservation Area (Northcutt CA)	7917	1979	80	Audrain	Wildlife	Wildlife
F. O. and Leda J. Sears Memorial Wildlife Area (Sears WA)	8012	1980	160	Audrain	Wildlife	Wildlife

Statements of Purpose:

A. Strategic Direction

These areas are managed for healthy grasslands, forest, and aquatic resources that provide the public with an opportunity to use and enjoy them.

B. Desired Future Condition

The desired future condition is forest and grassland habitats with minimal invasive species.

C. Federal Aid Statement

N/A

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

Area Name	Priority Areas	Natural Areas
Lowe CA	None	None
Northcutt CA	None	None
Sears WA	None	None

II. Important Natural Features and Resources

Area Name	Caves	Springs	Species of Conservation Concern
Lowe CA	None	None	None
Northcutt CA	None	None	None
Sears WA	None	None	None

III. Existing Infrastructure

Area Name	Parking Lot	Trails	Other
Lowe CA	1	Lowe Trail (1.5 miles)	1 fishless pond (0.25 acres); Teal Lake Wetland (5 acres)
Northcutt CA	1	None	None
Sears WA	1	None	Sears Prairie (160 acres)

IV. Area Restrictions or Limitations

Area Name	Deed Restrictions	Federal Interest	Easements	Cultural Resources	Endangered Species	Boundary Issues
Lowe CA	None	Yes ²	Yes ³	None	None	None
Northcutt CA	None	Yes ²	None	None	None	None
Sears WA	Yes ¹	Yes ²	Yes ⁴	None	None	None

¹ No hunting allowed by deed.

² Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.

³ Utilities and power line

⁴ Pipeline, power line, water line

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) Reduce invasive species.
- 2) Maintain healthy forest habitats.
- 3) Enhance and maintain grassland communities.
- 4) Increase knowledge of existing wildlife populations and habitats.

Management Objective 1: Reduce abundance of invasive species.

Strategy 1: Remove invasive vegetation, including sericea lespedeza, fescue, autumn olive, and bush honeysuckle using various techniques including but not limited to mechanical or chemical means (e.g., cutting or applying herbicide), as is appropriate. (Wildlife)

Management Objective 2: Maintain healthy trees with management emphasis on wildlife habitat.

Strategy 1: Monitor wooded areas for invasive exotic species, diseases, and insects. Suppress any infestations that may occur. (Wildlife)

Strategy 2: Retain and protect existing den trees. (Wildlife)

Strategy 3: A forest inventory at Northcutt CA was completed in 2016 and its recommendations of 2 to 3 prescribed fires followed by a potential thinning will be implemented. (Wildlife)

Management Objective 3: Enhance and maintain grassland communities.

Strategy 1: Conduct prescribed burns on a rotation dictated by site conditions to stimulate the growth of grasses and forbs and set back woody succession. (Wildlife)

Strategy 2: Over-seed native forbs to increase plant diversity. (Wildlife)

Management Objective 4: Increase knowledge of existing wildlife populations and habitats.

Strategy 1: Survey Northcutt CA for the presence of reptiles and amphibians. (Wildlife)

Strategy 2: Survey Sears WA for the presence of nesting upland and wetland-dependent species. (Wildlife)

VI. Aquatic Resource Management Considerations

Aquatic resources at Sears WA include two small seasonal drainages and six circular 0.5-acre fishless ponds. Poor drainage allows for numerous small seasonal wetlands with wetland-dependent plants and animals.

Northcutt CA is bisected by Skull Lick Creek, a third-order stream. The stream bisects the area for 0.8 miles.

Lowe CA includes two streams and a 0.25-acre fishless pond. Teal Creek is a third-order stream that flows across Lowe CA for 0.8 miles. An unnamed first-order intermittent stream crosses Lowe CA for 0.3 miles.

Challenges and Opportunities:

- 1) Maintain stream fish communities and habitat.
- 2) Maintain fishless ponds.
- 3) Implement best watershed and riparian management practices.

Management Objective 1: Implement appropriate management strategies to maintain healthy aquatic resources and stream habitat.

Strategy 1: Inventory fish populations every five to seven years, or as needed.
(Fisheries)

Strategy 2: Monitor streams for erosion problems. (Fisheries)

Management Objective 2: Maintain fishless ponds.

Strategy 1: Monitor ponds for fish and chemically renovate as needed.
(Fisheries)

Management Objective 3: Implement best watershed management practices.

Strategy 1: Maintain fields, field borders, and riparian corridors with native vegetation to minimize erosion (Wildlife)

VII. Public Use Management Considerations

Lowe CA receives light public use. The northern portion of Lowe CA is within the Mexico City limits and is closed to hunting. The remaining acres are used lightly by archers and small-game hunters. Trails around the area's native plantings are mowed and maintained for users to enjoy.

Northcutt CA receives light public use. It is used primarily by a few fall archery hunters. The area's meandering stream and large trees provide an enjoyable place to visit.

Sears WA receives light public use. The area is closed to hunting by deed. An interpretive sign at the parking lot describes management efforts that have been underway since the early 2000s to restore the prairie community. The area's plentiful wildflowers, seasonal wetlands, and abundant wildlife make this a pleasurable stop for area visitors.

Challenges and Opportunities:

- 1) Provide hunting and wildlife viewing opportunities.
- 2) Provide walking and exploration opportunities.
- 3) Maintain infrastructure at current levels.

Management Objective 1: Provide hunting and wildlife viewing opportunities for the public.

Strategy 1: Manage habitats for a variety of wildlife species. (Wildlife)

Management Objective 2: Provide hiking and viewing opportunities.

Strategy 1: Maintain trails by mowing and keeping them free of obstructions.
(Wildlife)

Strategy 2: Route trails through areas of quality habitat or habitats that are rare in Audrain County. (Wildlife)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Maintain infrastructure at current levels.

Management Objective 1: Maintain infrastructure at current levels.

Strategy 1: Maintain infrastructure at Level 1 according to Missouri Department of Conservation guidelines (Wildlife)

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26
Terrestrial Resource Management Considerations										
<i>Objective 2</i>										
Strategy 3			X			X	X			
<i>Objective 4</i>										
Strategy 1		X	X				X	X		
Strategy 2		X	X				X	X		

APPENDICES

Public Input Summary:

The draft Lowe, Northcutt, and Sears Conservation Areas Management Plan was available for a public comment period April 1-30, 2016. The Missouri Department of Conservation received no comments during this time period.

Appendices:

Appendix 1. Location of Lowe CA, Northcutt CA and Sears WA in Audrain County

Appendix 2. Lowe CA Background

Appendix 3. Lowe CA Map

Appendix 4. Lowe CA Land Cover Types

Appendix 5. Lowe CA Aquatic Resources

Appendix 6. Lowe CA Easements

Appendix 7. Northcutt CA Background

Appendix 8. Northcutt CA Map

Appendix 9. Northcutt CA Land Cover Types

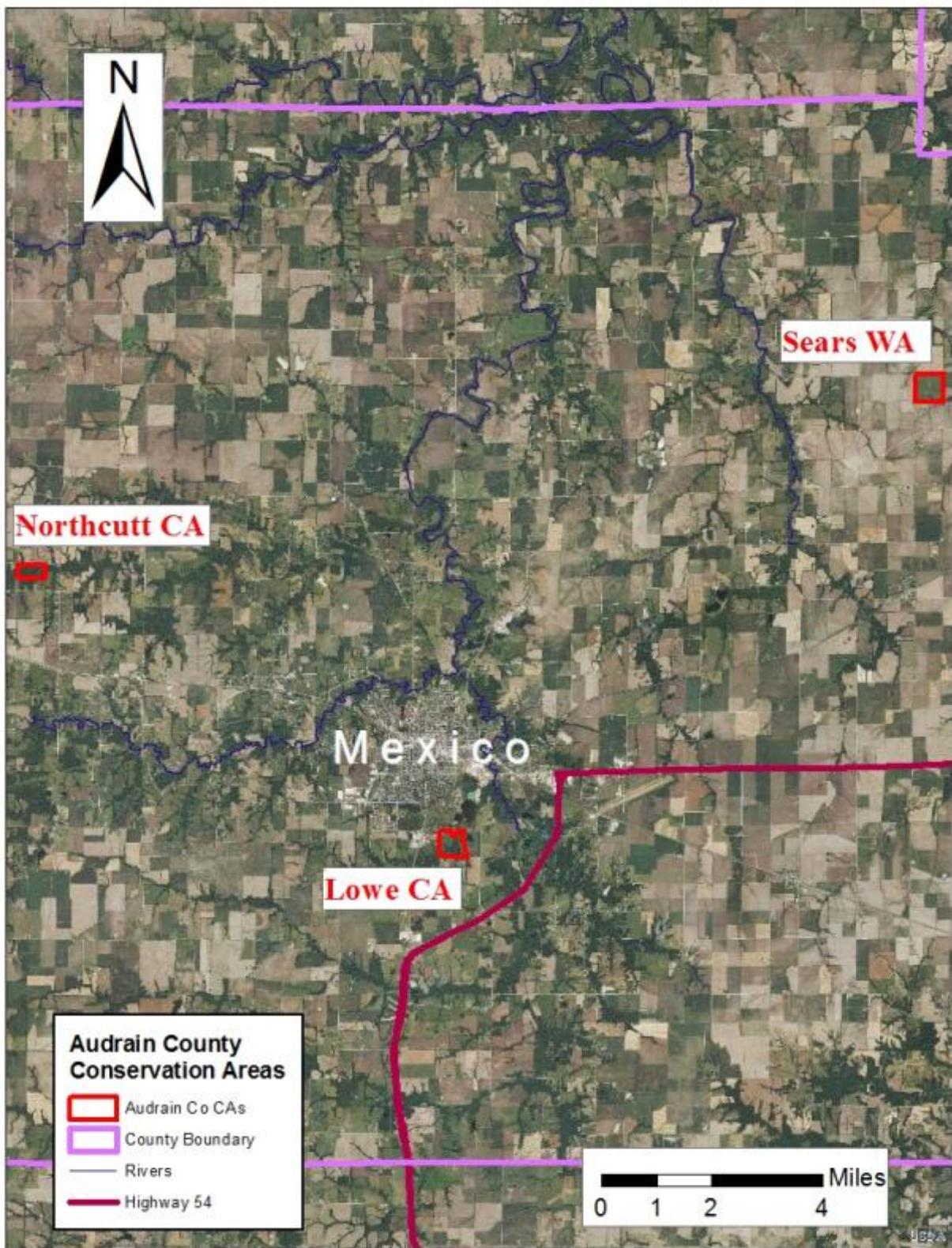
Appendix 10. Sears WA Background

Appendix 11. Sears WA Map

Appendix 12. Sears WA Land Cover Types

Appendix 13. Sears WA Easements

Appendix 1. Location of Lowe CA, Northcutt CA and Sears WA in Audrain County



Appendix 2. Lowe CA Background

The William Lowe Conservation Area (Lowe CA) is located on the southern edge of Mexico, Missouri. Its northern portion is within city limits.

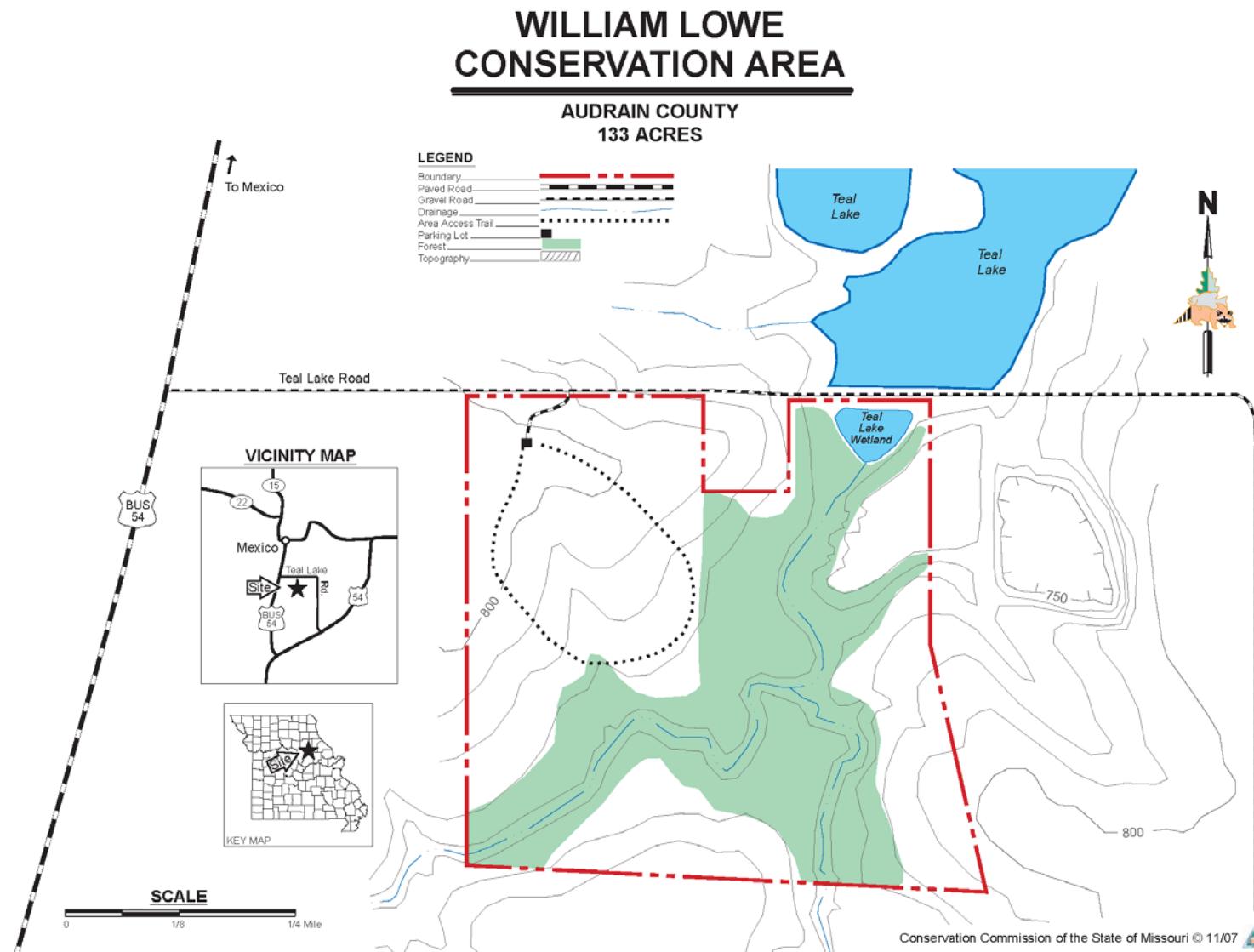
Prior to its acquisition in 2003, Lowe CA was grazed by horses and cut for hay. The cool-season pastures were planted to native grasses and forbs in the mid-2000s, and are managed with fire. Teal Creek bisects the property and is bordered by mature timber of poor quality with an understory heavily infested with invasive bush honeysuckle. Two small wetlands are present along the creek.

The northern portion of Lowe is in the city limits of Mexico and is closed to hunting while the other acres receive light pressure from archers and small game hunters.

Lowe CA Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Grassland	59		44
Forest	52		39
Old field	19		14
Wetland	3		3
Total	133		100
Stream frontage		0.8	

Appendix 3. Lowe CA Map



Appendix 4. Lowe CA Land Cover Types



Appendix 5. Lowe CA Aquatic Resources



Appendix 6. Lowe CA Easements



Appendix 7. Northcutt CA Background

Clarence L. Northcutt Memorial Conservation Area (Northcutt CA) is near Route E, 7.5 miles west and north of Mexico.

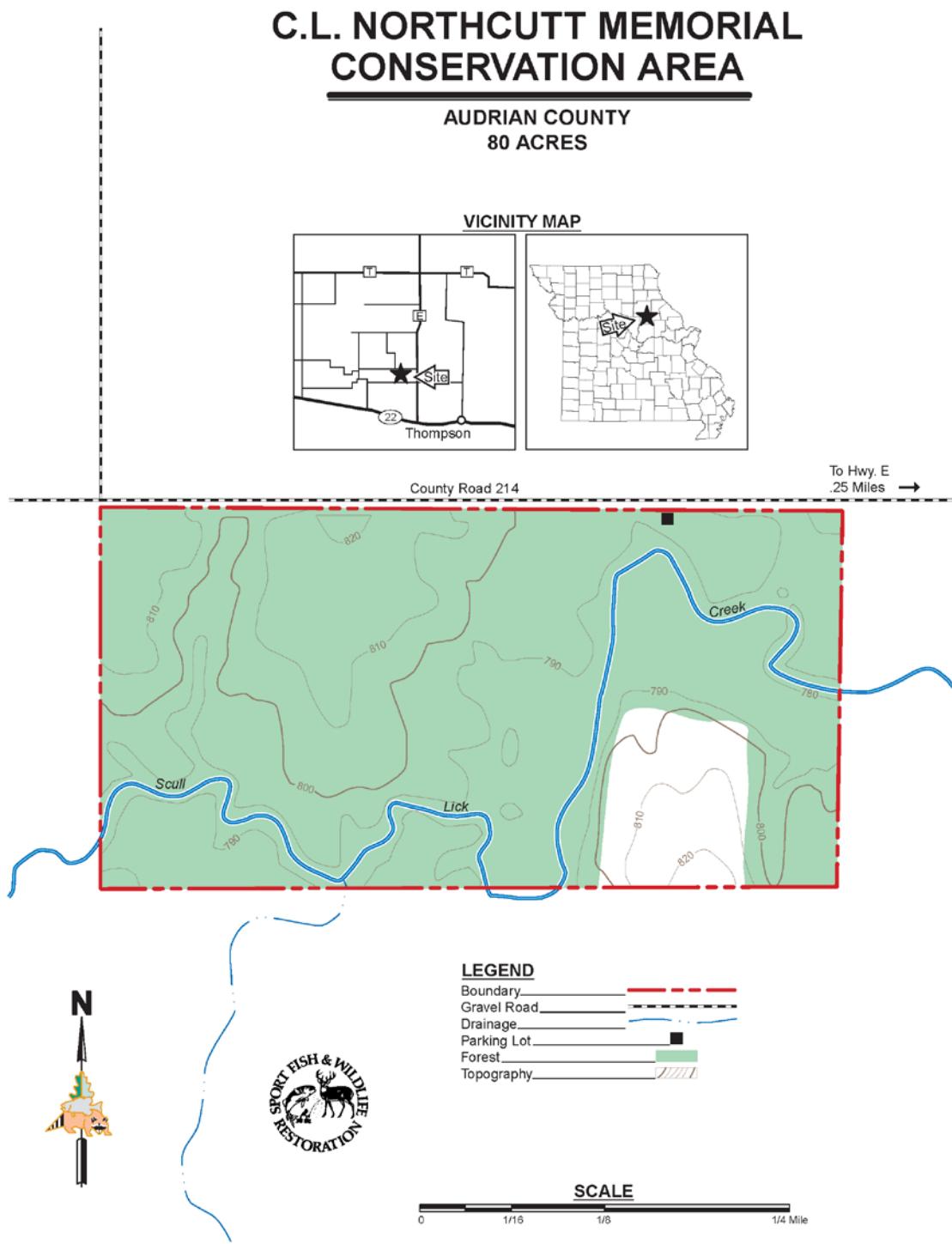
Large mature trees and Skull Lick Creek are the dominant features of this property. The area is entirely forested except for a small old field that is advancing into a stage of early successional forest. Bottomland hardwoods lie in the plain along the creek while the higher elevations are an oak-hickory forest. Large (60"dbh) white oaks are present in the northwest corner indicating what was once savanna in pre-settlement times. Seventy-two acres had timber stand improvement work completed in 1989.

Skull Lick Creek flows for 0.8 miles through the area. The creek has high steep mud banks, making it difficult to cross except during periods of low flow. Little management activity has occurred on this property other than marking boundaries and litter removal from the parking lot.

Northcutt CA Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Forest	73		91
Old field	7		9
Total	80		100
Stream frontage		0.8	

Appendix 8. Northcutt CA Map



Appendix 9. Northcutt CA Land Cover Types

Clarence L. Northcutt Memorial Conservation Area



Legend

- forest
- old field
- streams
- parking lot
- roads



0 250 500 1,000 Feet

Appendix 10: Sears WA Background

F.O. and Leda J. Sears Memorial Wildlife Area (Sears WA) is 3.5 miles north of Rush Hill on Route B. Former Conservation Commissioner G. Andy Runge was the attorney for the Sears family and was instrumental in this property being deeded to the Missouri Department of Conservation. The intent was to provide habitat for greater prairie chickens in Audrain County. However, they were disappearing from the landscape by the time the Missouri Department of Conservation gained control of the property in 1990. The most recent known occurrence of nearby prairie chickens is 1995.

All of the open acres were planted with a mix of native grasses and forbs, except for the northeast quarter that was row cropped through 1994 in the hopes that prairie chickens would use it as a lek. When it became evident that prairie chickens were not present, the remaining acres were planted to native vegetation.

Sears WA is poorly drained with little topographic relief and a hard clay-pan soil layer near the soil surface. Native grasses and forbs were planted on all the open acres in the mid-1990s and are managed with fire. The wetness of the soil can impede vehicle access. Wetland plants are common across the area. The grassland and surrounding hedgerow on two-and-a-half sides of the area provide an oasis of wildlife habitat in a landscape dominated by intensive agriculture. Six circular fishless ponds were constructed to provide reptile and amphibian habitat.

Sears WA Current Land and Water Types:

Land/Water Type	Acres	Feet	% of Area
Grassland	136		85
Hedgerow	13		8
Wet meadow	10		6
Ponds	1		1
Total	160		100
Stream frontage		NA	

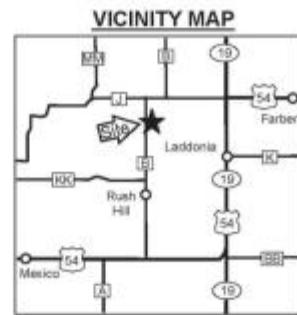
Appendix 11. Sears WA Map

**F.O. AND LEDA J. SEARS
MEMORIAL WILDLIFE AREA**

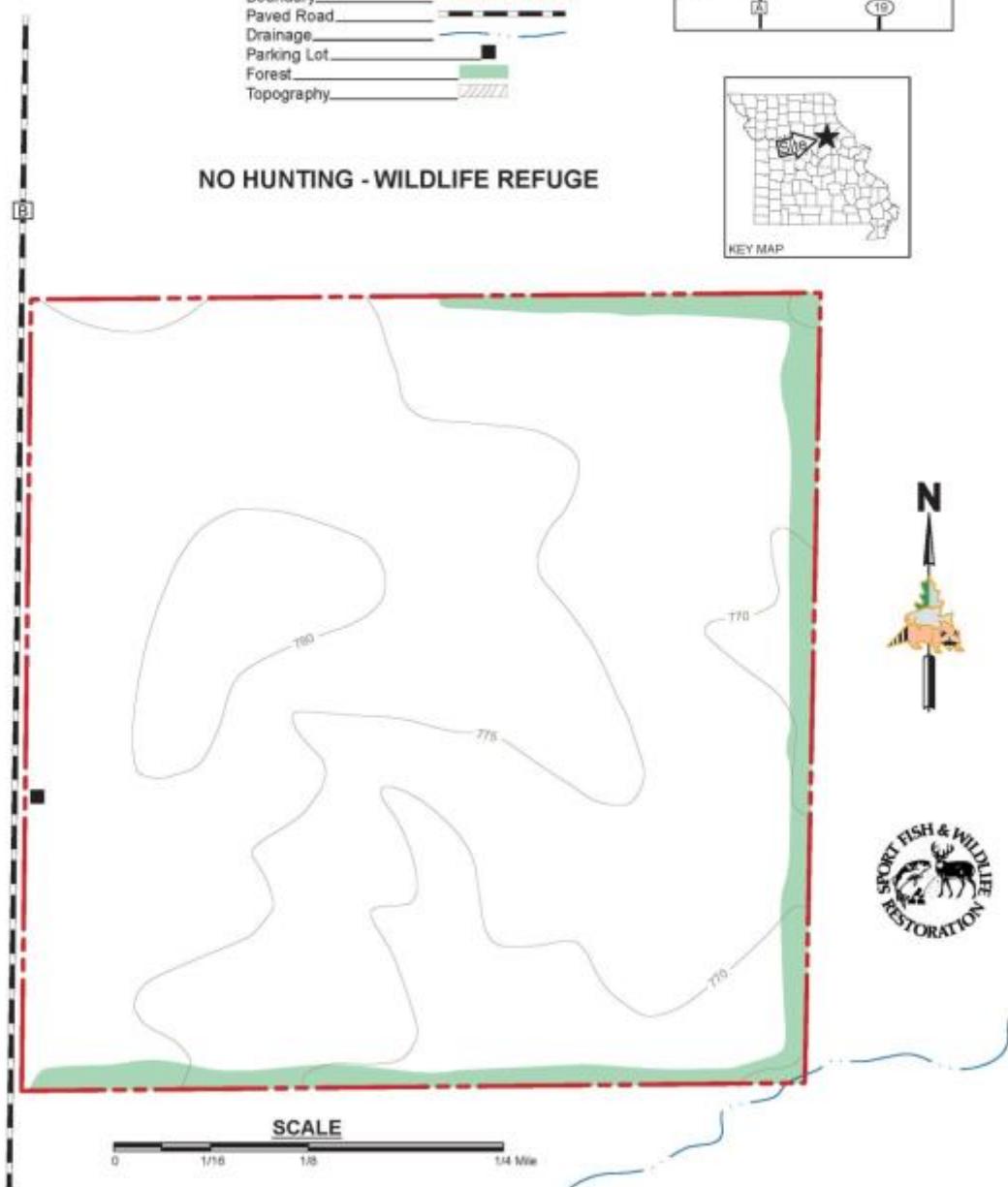
**AUDRAIN COUNTY
160 ACRES**

LEGEND

- Boundary _____
- Paved Road _____
- Drainage _____
- Parking Lot _____
- Forest _____
- Topography _____



NO HUNTING - WILDLIFE REFUGE



Appendix 12. Sears WA Land Cover Types

F.O. and Leda J. Sears Conservation Area



Legend

- roads
- parking lot
- ponds



landcover

- grassland
- hedgerow
- wetland

0 250 500 1,000 Feet

Appendix 13. Sears WA Easements

